

PESTS OF SIGNIFICANT PUBLIC HEALTH IMPORTANCE

COMMON NAME	TAXONOMIC NAME	PUBLIC HEALTH IMPORTANCE
ARTHROPODS	ARTHROPODA	
INSECTS	INSECTA	
American cockroach Australian cockroach brownbanded cockroach German cockroach Oriental cockroach	<i>Periplaneta americana</i> <i>Periplaneta australasiae</i> <i>Supella longipalpa</i> <i>Blattella germanica</i> <i>Blatta orientalis</i>	asthma, allergy, food contamination
body louse (cootie) head louse crab louse (crabs)	<i>Pediculus humanus humanus</i> <i>Pediculus humanus capitis</i> <i>Phthirus pubis</i>	skin irritation, rashes, epidemic typhus, trench fever and epidemic relapsing fever
mosquitoes	Culicidae to include <i>Culex</i> spp., <i>Culiseta</i> spp., <i>Aedes</i> spp., <i>Anopheles</i> spp., <i>Psorophora</i> spp., <i>Mansonia</i> spp., and <i>Coquillettidia</i> spp.	malaria; St. Louis, Eastern, Western, and LaCrosse encephalitis; dengue, yellow fever
MAMMALS	MAMMALIA	
commensal rats	<i>Rattus</i> spp.	plague reservoir, contamination of stored food.
cotton rat	<i>Sigmodon hispidus</i>	hantavirus pulmonary syndrome
deer mouse	<i>Peromyscus maniculatus</i>	hantavirus pulmonary syndrome
house mouse	<i>Mus musculus</i>	contamination of stored food. salmonellosis
rice rat	<i>Oryzomys palustris</i>	hantavirus pulmonary syndrome

white-footed mouse	<i>Peromyscus leucopus</i>	hantavirus pulmonary syndrome
MICROORGANISM TYPE TAXONOMIC NAME	PUBLIC HEALTH IMPORTANCE - CLINICAL SIGNIFICANCE	
BACTERIA		
<i>Acinetobacter</i> spp. (1)	nosocomial infections	
<i>Burkholderia cepacia</i> (1)	opportunistic pathogen - endocarditis, septicemia, wound infections	
<i>Chlamydia psittaci</i> (1)	psittacosis (ornithosis)	
<i>Clostridium difficile</i> (5)	antibiotic-associated pseudo membranous colitis	
<i>Clostridium perfringens</i> (5)	gas gangrene	
<i>Clostridium botulinum</i> (2)	botulism	
Coagulase negative <i>Staphylococcus</i> spp. (1)	bacteremia, infective endocarditis, peritonitis associated with dialysis and predominantly genitourinary tract infections.	
<i>Enterobacter aerogenes</i> (2) and related species (2)	wound infection, other nosocomial infections, urinary tract infections, gastroenteritis	
<i>Enterococcus faecalis</i> (1)	wound infections, bacteremia, endocarditis, urinary tract infections may lead to meningitis.	
<i>Escherichia coli</i> (2)	urinary tract infections, septicemia, diarrhea, hemorrhagic colitis	
<i>Fusobacterium necrophorum</i> (1)	abscesses	
Group A Streptococci - beta hemolytic e.g. <i>Streptococcus pyogenes</i> (1)	pharyngitis, tonsillitis, sinusitis, arthritis. Infection can lead to rheumatic fever, scarlet fever, or impetigo	
Group B Streptococci e.g., <i>Streptococcus agalactiae</i> (1)	neonatal disease: pneumonia, septicemia, meningitis; adult disease: pneumonia, meningitis, endocarditis	
Group C Streptococci e.g., <i>Streptococcus equisimilis</i> (1)	pneumonia, pharyngitis, endocarditis, meningitis	

<i>Klebsiella pneumoniae</i> (2)	opportunistic pathogen, pneumoniae, infant diarrhea and urinary tract infections
<i>Leptospira spp.</i>	myalgia, conjunctival suffusion, jaundice, kidney damage
<i>Listeria monocytogenes</i> (2)	food poisoning, abscess, abortion and meningitis
<i>Mycobacterium fortuitum-chelonei</i> complex (1)	pulmonary, cutaneous abscesses, post-operative wound infections
<i>Mycobacterium avium</i> - intracellular complex <i>Mycobacterium kansasii</i>	pulmonary disease similar to tuberculosis
<i>Mycobacterium tuberculosis</i> (1)	tuberculosis
<i>Pasturella multocida</i> (1)	opportunistic pathogen - meningitis, arthritis, otitis, septicemia, sinusitis, encephalitis
<i>Proteus mirabilis</i> (1) <i>Proteus vulgaris</i> (1)	urinary tract infections, infant diarrhea, respiratory infections
<i>Pseudomonas aeruginosa</i> (1)	infects wounds/causes septicemia, abscesses, and meningitis
<i>Pseudomonas fluorescens</i> , <i>P. putida</i> , <i>P. stutzeri</i> (1)	respiratory and urinary tract infections, infects wounds, bacteremia
<i>Pseudomonas maltophilia</i> (1)	urinary tract infections
<i>Rhodococcus</i> spp. (1)	opportunistic pathogen in immune compromised individuals
<i>Salmonella typhi</i> , <i>S. paratyphi</i> (2)	typhoid fever
<i>Salmonella cholerasuis</i> (2)	gastroenteritis, septicemia, bacteremia, and arthritis.
<i>Salmonella typhimurium</i> (2)	enterocolitis, gallbladder infection
<i>Salmonella enteritis</i> (2) and many other serovars	salmonellosis(food poisoning), septicemia, diarrhea
<i>Shigella flexneri</i> (2)	dysentery, diarrhea
<i>Shigella dysenteriae</i> (2)	dysentery, diarrhea

<i>Shigella sonnei</i> (2)	dysentery, diarrhea
<i>Staphylococcus aureus</i>	skin infections such as cellulitis, boils, carbuncles, impetigo, and post operative wound infections. Can cause food poisoning and toxic shock syndrome. Bacteremia, endocarditis, meningitis, pneumonia, and osteomyelitis
<i>Streptococcus pneumoniae</i> (1)	pneumonia, otitis media, bacteremia, meningitis
PROTOZOANS	
<i>Cryptosporidium</i> spp. (2)	diarrhea
<i>Cyclospora</i> sp. (2)	diarrhea, nausea
<i>Giardia lamblia</i> (2)	dysentery
VIRUSES	
Coxsackieviruses A1-A22, A24, B1-B6	meningitis (A7, A9, B1-B6); myocarditis (B); hand-foot-mouth disease (A9, A16); colds (A21, A24, B)
Cytomegalovirus (1)	congenital abnormalities in newborns, mononucleosis; various infections in the immunocompromised
Echoviruses 1-34 (not 10 or 28)	chronic meningoencephalitis; myocarditis; maculopapular exanthema (9, 16); colds (11, 20); neonatal carditis, encephalitis, hepatitis (11)
Erythrovirus: Parvovirus B19 (5)	erythema infectiosum (fifth disease); arthritis; aplastic chronic anemia; hydrops fetalis
Hepatitis A (2)	hepatitis
Hepatitis E (2)	hepatitis
Hepatitis B (3)	hepatitis
Herpes Simplex Virus Type 2 (3)	genital lesions
Herpes Simplex Virus Type 1 (1)	fever blisters and canker sores
HIV strains (3)	AIDS
Human T-Cell Lymphotropic viruses (3)	leukemia/lymphoma; tropical spastic paraparesis (TSP)

Influenza C (1)	Flu
Influenza B (1)	Flu
Influenza A (1)	Flu
Measles virus (1)	measles
Mumps virus (1)	mumps
Parainfluenza viruses (1)	respiratory tract infections-bronchiolitis, pharyngitis croup, pneumonia; fever
Poliovirus (2)	polio
Rabies virus (4)	Rabies
Respiratory Syncytial virus (1)	pneumonia, bronchitis
Rhinoviruses 1-100 (1)	colds
Rotaviruses (2)	gastroenteritis: vomiting generally preceding diarrhea
Rubella virus (1)	rubella
Ventricular stomatitis virus (1)	influenza-type illness; fever chills, muscle pain

FOOTNOTES:

- (1) Transmitted by respiratory or nosocomial contact.
- (2) Transmitted by contaminated food or water.
- (3) Transmitted by blood or other body fluids.
- (4) Transmitted by the bite of an arthropod or other animal.
- (5) Transmitted by contact with other environmental factors.